

M-10703 US
745014 v1

EXPRESS MAIL LABEL NO:

EL707908094US

**PERIODIC PATTERNS AND TECHNIQUE TO CONTROL
MISALIGNMENT BETWEEN TWO LAYERS**

5

ABSTRACT OF THE DISCLOSURE

A method and system to measure misalignment error between two overlying or interlaced periodic structures are proposed. The overlying or interlaced periodic structures are illuminated by incident radiation, and the diffracted radiation of the incident radiation by the overlying or interlaced periodic structures are detected to provide an output signal. The misalignment between the overlying or interlaced periodic structures may then be determined from the output signal.